assures me she has not been so well for years.

I have selected this individual case from several others which I have met with in my own practice, equally successful in their results, and have endeavoured to make the narration simple and practical, in the hope that others, more able, may be induced to put the profession and the public in possession of their observations and experience in the treatment of this fearful and generally fatal disease.

Newman Street, Oxford Street,
August, 1830.

P.S. The above case is not published as anything new to the profession, nor to claim any originality on my part, although, in justice to myself, I must declare, that I was led to the treatment in similar cases by accident, not having read Dr. Blackall's or Dr. Ayre's book on this disease, until subsequent to the treatment of the case above cited.

EXPANSION OF THE HORSE'S FOOT.

To the Editor of THE LANCET.

SIR,—My attention has been called to a letter at page 687 of a late Number of THE LANCET, the writer of which has cited passages from certain authors, in order to prove that your reviewer was in error, in ascribing to Mr. Bracy Clark the merit of that important discovery, the elasticity of the horse's foot. These authors have long been perfectly familiar to me; but since the passages quoted, taken, as they are, without the context, would probably lead to incorrect conclusions in other minds, I must request the liberty of making a few remarks upon them. I apprehend it will be agreed, on all hands, that the proper question in such a case must be, To whom is the merit due? for, if the observation of King Solomon, "There is nothing new under the sun," were correct in his day, it is still more so in the nineteenth century, and particularly on subjects of a physiological nature. If the remarks of casual observers were allowed to supersede and invalidate the claims of those enlightened men whose lives have been spent in unfolding the importance of unnoticed truths before the eyes of the world, where, let me ask, would be the fame of Dr. Jenner, when it is ascertained that the fact which he laboured to substantiate was currently known, and had been frequently observed before his time; or what would become of the immortal renown of Harvey, if Milton's beautiful description of the circulation may be adduced as proof on the poet's part, that he knew of the fact physiologically, and deserved the honour? The

same as regards inventions in mechanics; with a few glorious exceptions, they are but shades of improvement succeeding each other, as we may find by searching for the real inventor of the steam-engine, or the origin of printing. But he who has ever been much concerned in real discovery, will know what slight impediments may obstruct the progress of knowledge for centuries; and that, when on the very threshold of a discovery, our prejudices and education may prevent our seeing the simple truth which is beyond it. In most cases we must give to the first observer a share of merit, but a higher award becomes necessary, and it is to him who understands his subject upon principle, and proves it by undeniable experiment, that the gratitude of mankind should be paid; to the man who gives to an unheeded principle a useful *practical application*, and takes on himself the almost certain obloquy of encountering the prejudices of the world.

In this point of view let us contrast the respective merits and claims of Mr. Bracy Clark and his predecessors. The passages which have been taken from the works of Mr. Freeman and James Clark contain *all* that can be advanced in their favour; they observed that there was a degree of elasticity at the heels, which it is scarcely possible to handle the horse's foot without perceiving; but the latter hardly goes further than to say that the texture of the frog is soft and elastic, and the former confounds the elasticity of the heels with the play of the muscles of the leg; and though his book opens by making a fair step towards the truth, yet he finally loses sight of this expansion altogether, and leaves it as an observation he had made, bearing no important consequences, and leading to no valuable result. That they saw the "expansion of the heels," as they term it, I frankly admit, but they saw without understanding it; and their claims are about on a par with those of one who notices the existence of a new species of trees or plants, or an undescribed insect, but who leaves to more acute and patient investigators, the discovery of their true character, singular history, or valuable medicinal qualities. That they did not comprehend it, is clear; for after a few unconnected remarks on the subject, the meaning of which was in obscurity until Mr. Bracy Clark made known the principle, they proceed to give a very incorrect account of the anatomy of the foot; and, finally, they both recommend the application of a shoe, made like that in common use, nailed on both sides, and totally restraining that "expansive action" for which it is now pretended for the first time, that they deserve so much credit and commendation. If their works really conveyed

a truth of such importance, how did it happen that no one, until this day, during the lapse of forty years, has ever made the discovery in the book themselves? Perhaps the impression which the perusal of a book leaves on the mind, may be regarded as a fair criterion of the nature of its contents; yet it does not appear that either James Clark's, or Freeman's, work has ever conveyed a knowledge of the expansion principle to the mind of a single reader. Take, for example, Mr. Coleman (whose authority I am not much in the habit of quoting). The only observation elicited from the ingenious professor, after an attentive reading of Freeman's book, was as follows:—

Vide Coleman on the Foot, p. 32. "Mr. Freeman, who has published a splendid work on the foot of the horse, labours to prove that the whole spring of the animal depends on the navicular bone; but he has not observed the descent and spring of the small splint-bones,* the great degree of motion of the two sesamoids, and the greatest spring of all, the elastic attachment of the coffin bone to the crust," &c. &c.

This is allowing Freeman too little credit. I admit that he saw the expansive action of the foot, but he neither demonstrated it so as to be intelligible to others, nor made any practical application of it, and was utterly ignorant of those important considerations resulting therefrom which alone render such a knowledge of value to us. Mr. B. Clark was himself the first to observe† "that both Moorcroft and Osmer many years back had obscure ideas of the effects of the compression of the feet from shoeing," though, he adds, that the passages in which they allude to it had not struck him on first perusal, nor until after the principle became apparent to his mind. Left in this state, the elasticity of the foot required to be rediscovered, before it could be of service to mankind, or the horse. As an amateur, for he was no other, Mr. Freeman deserves greater praise than he ever received from his contemporaries in the veterinary profession, whom he constantly acknowledged as his teachers, and who, one and all, like himself, recommended shoes which opposed and prevented expansion of the horse's foot.

Let us now revert to the claims of Mr. Bracy Clark, with whom the idea of this

discovery was perfectly original, as may be seen by his works; indeed, he arrived at a knowledge of it whilst making experiments to relieve contracted feet, and not by any chance or casualty, but by a course of regular induction. He immediately proceeded to establish his view by every possible means, viz., by a long and conclusive experiment related in his work on the subject, by a new and masterly description of the anatomy of the foot, showing, in the clearest manner, that the whole structure was subservient to the one principle of elasticity, by public lectures having the same object; and, finally, by insisting that the hoof, as an expansive organ, required an expansive defence to be consistent with nature. Of this doctrine he was the earnest and devoted champion for a number of years, standing almost alone against the opposition of the profession and the public, and occupied in perfecting its practical application, while his contemporaries were pursuing the phantom folly of frog-pressure and patent-shoes. It is needless to recount the successive steps in practice which led to the present expansion-shoe; nor the expedients of tips, removable shoes, and side-nailing, which were had recourse to for the same purpose; but it has been the main object of his life, and never was a discovery in physiology, and its application to practice, more exclusively due to the labours of one individual. While the concave and frog-pressure, the French and the Persian systems of horse-shoeing, are finding their grave in this country, it becomes the fashion with some veterinary surgeons to adopt the views of Mr. Clark, but, for the sake of novelty, with as much variation and as little acknowledgment as possible, in the means of effecting it. He cannot be sorry to see them adopted under any circumstances. But when it is no longer possible to refuse assent to new doctrines, the next measure has always been to impeach the originality or merit of the discoverer, which has at least one good tendency, that of raising the contested object in popular estimation.

It is always easy to dispute a claim of this nature, and to defend it requires a certain doubling of the matter and lengthening of the argument; and as it has made my explanation more tedious than would be desirable, I hasten to conclude by requesting the favour of an early insertion.

Your obliged, humble servant,

CHARLES CLARK.

Veterinary Infirmary,
Stamford Street, August 26th.

* "The small splint-bones are two in number, and are nearly as long as the cannon-bone. They are connected to the cannon-bones laterally by elastic ligaments, and articulate above with the bones of the knee, in the fore extremities, and, in the hind extremities, with those of the hock."

† Vide his work on the foot, p. 11, 1st edition.